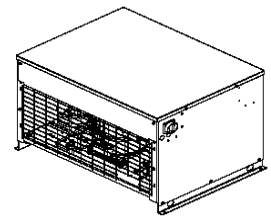
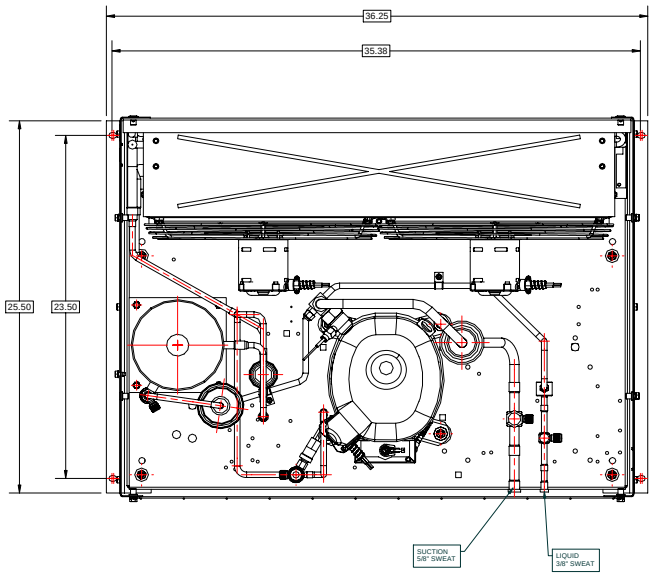
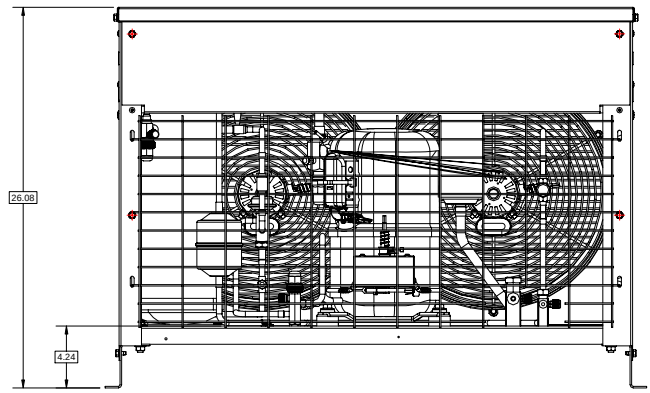
TECUMSEH HERMETIC CONDENSING UNIT

Model	**AWA9490ZXTHN**
BOM	**32L1902-2E**
Air Cooled	**1 HP**
Application	**Commercial Temp**
Refrigerant	**R404A**







Model	Dim. Enclosure(inch)*			Line connections		Pumpdown	Air flow	Oil Ch.	Gross weight
	L	W	H	Suction	Liquid	90% @ 90°F	SCFM	Oz.	Lbs.
AWA9490ZXTHN	31.50	40.50	26.75	5/8	3/8	20.16	1800	38.6	320

*) Enclosure Mounting Holes, 38.5 x 25.5

Factory charge 20 psig dry air, **MUST BE EVACUATED**

Evaporator		Ambient Temeratures															
		80°F				95°F				100°F				110°F			
°F	Psig	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T
-10	23.2	4800	1300	206	91	3700	1230	251	105	3300	1200	268	109	2500	1150	306	119
-5	27.5	5900	1350	208	91	4600	1280	255	105	4100	1260	272	110	3200	1210	310	120
0	32.1	7300	1410	211	92	5700	1350	258	106	5200	1330	276	111	4100	1290	314	121
5	37.0	8800	1480	214	93	7000	1440	262	107	6400	1420	280	112	5200	1380	318	122
10	42.4	10500	1560	217	94	8400	1530	267	109	7700	1520	284	113	6400	1490	322	123
15	48.2	12300	1650	221	96	9900	1630	271	110	9200	1620	289	115	7700	1610	327	124
20	54.5	14100	1730	226	97	11500	1730	277	111	10700	1730	295	116	9100	1730	333	125
25	61.2	16000	1810	231	99	13100	1840	283	113	12200	1840	301	117	10500	1850	339	126
30	68.4	17900	1890	238	101	14800	1940	290	115	13800	1950	308	119	11900	1980	345	128
35	76.1	19700	1960	245	103	16300	2030	297	117	15200	2050	315	121	13200	2100	353	130
40	84.4	21500	2010	253	105	17800	2110	306	119	16600	2150	323	123	14400	2210	361	131
45	93.2	23100	2050	262	107	19100	2180	315	121	17900	2230	333	125	15500	2310	370	133
50	103.0	24600	2070	272	110	20300	2240	325	124	18900	2290	343	128	16400	2390	380	135
55	113.0	25800	2080	283	113	21200	2270	337	126	19800	2340	354	130	17000	2460	391	138

Performance @ 60 Hz ; Return Gas Temperature 20°F max superheat above 20°F evap, 40°F max below 20°F evap ; --- SubCooling 5°F

PRELIMINARY PERFORMANCE DATA

Parts/Specifications

STANDARD

Unit BOM	**32L1902-2E**	Fan Motor	810F050C20
Unit MODEL	**AWA9490ZXTHN**	Fan Motor Qty	2
		Fan Motor RLA	0.7
Refrigeration RANGE	-10°F to 45°F	Fan Blade	51568
Design Pressure Low	181	Fan Guard	70831
Design Pressure High	450	Shroud	70648-2
Volts - HZ - Ph	200-230V 3~ 60HZ		
Voltage Range	180 - 254	High Pressure switch	84095-2L
Min. Circuit Ampacity	9.94	Low Pressure Control	84026-2
Max. Fuse Size	15	Dual Pressure Conrol	
Compressor MODEL	AW616RT-121-A2	Condenser	50855-1
Compressor BOM	AWA9490ZXT	Head Master Valve	70083-1
Compressor LRA	51	Check Valve	56626
Compressor RLA	4.70	Process Valve	
		Liquid Valve	56500-K06
OverLoad		Suction Valve	56500-10K
Relay			
Run Capacitor		Receiver	51099-2L
Run Capacitor Rating		Receiver Qty	1
Start Capacitor		Accumulator	
Start Capacitor Rating		Liquid Filter	70081-3
Contactor	91014B	Sight Glass	70084
		Suction Filter	70822-6S
Unit Drawing	DGU1918-L305		
Wiring Diagram	WD23-2FM	CrankCase Heater	91022-1

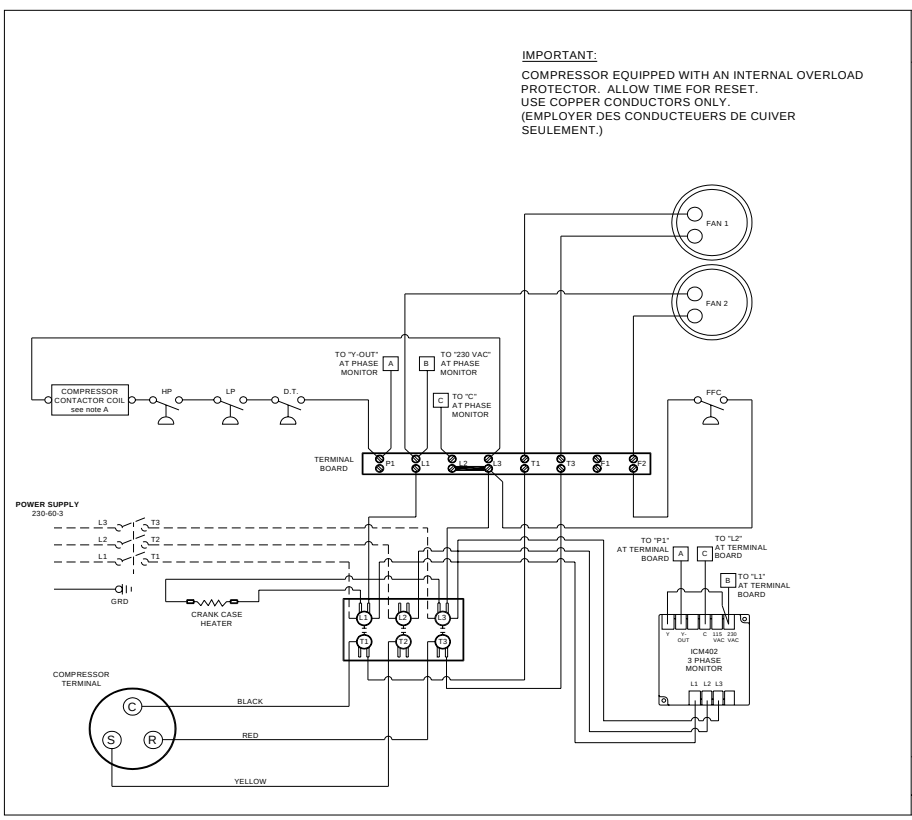
OPTIONAL

Fix.Fan Switch #1 (F opt.)	84132-01
Fix.Fan Switch #2 (F opt.)	
Adjus. Fan Ctrl. (A opt.)	
Defrost Clock (Tn option)	
Defrost Heaters Contactor	
Rec. Heater (R option)	
Solenoid Valve (loose)	
Disconnect (D option)	
Wiring with F option	WD23-2AT2
Wiring with A option	
Phase Monitor, ICM402	900-10026

BOM INDEX DESCRIPTION

32xYYYY- 2ERA(F)TnDS

E Enclosure
R Receiver Heater
A Adjustable fan control
F Fixed fan Control
T1 Defrost timer option
T2 Defrost timer & Defrost Heaters Contactor
D Disconnect
S Solenoid liquid Valve (supplied loose)



NOTES

FIELD WIRING NOTES

1. ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
2. CONNECT INCOMING POWER LEADS FROM POWER SUPPLY TO L1, L2, AND L3 IN COMPRESSOR CONTACTOR OR TO L1, L2 AND L3 IN DISCONNECT SWITCH (IF PROVIDED). USE COOPER CONDUCTORS ONLY. (EMPLOYER DES CONDUCTEURS DE CUIVER SEULEMENT.) PROVIDE EQUIPMENT GROUNDING CONDUCTOR. USE 75°C (MIN.) WIRING

GENERAL NOTES:

A. CONTACTOR COIL CIRCUIT IS FACTORY CONNECTED TO 230 V SOURCE IN PANEL AS SHOWN
B. COMPRESSOR EQUIPPED WITH AN INTERNAL OVERLOAD PROTECTOR. ALLOW TIME FOR RESET.

AFC — ADJUSTABLE FAN CONTROL
LP — LOW PRESSURE CONTROL
HP — HIGH PRESSURE SWITCH
D.T. — DISCHARGE THERMOSTAT
——— FACTORY COMPONENTS
..... OPTIONAL FACTORY COMPONENTS

CONDENSING UNIT WIRING, 230V 60Hz 3 Ph, fixed fan control,
PHASE MONITOR OPTION

-	WD23-2FM
REVISION	AUG. 18, 2009